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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,184	06/26/2003	Kazuhito Kojima	21776-00033-US1	1598
30678	7590	01/20/2006	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ LLP SUITE 800 1990 M STREET NW WASHINGTON, DC 20036-3425			LIN, SHEW FEN	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/606,184	<b>Applicant(s)</b> KOJIMA ET AL.
	<b>Examiner</b> Shew-Fen Lin	<b>Art Unit</b> 2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

- a. This action is responsive to application filed on 6/26/2003.
- b. The application claims priority to the continuation of application, 09/195099 (filed on 11/18/1998) and foreign priority of JP 9-334905 and JP 9-334906 (filed on 11/19/1997).
- c. Claims 1-6 are pending. Claims 1, 2, 3, 4, 5, and 6 are independent claims.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Page 26, paragraph 4, “step 53”. Page 27, paragraph 2, “step 55”, “step 56”, paragraph 3, “step 58”, “step 55”, “step 59”. Page 30, paragraph 4, “step 541”. Page 31, paragraph 1, “step 547”, “step 548”, paragraph 2, “step 553”, “step 554”. Page 35, paragraph 2, “metadata 73”. Page 36, paragraph 4, “al, bl, and ci”. Page 37, paragraph 2, “bi and b5”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 6 is ejected under 35 U.S.C. 102(e) as being anticipated by Purcell (US Patent 6,535,874).

As to claim 6, Purcell discloses a database system built by distributing on a network one or more databases (multiple non-homogeneous database, Figure 2, column 2, lines 63-67), and one or more first servers for searching the databases for real data (plurality of servers, each data associated with one of the servers, Figure 2, column 2, lines 63-67), the functions of: saving, by the first server, metadata which pertains to the database managed by that first server (factory class reads on metadata, store name/type of database, table name, column 6, lines 5-15), and providing the metadata in response to an external request (used by application, column 5, lines 47-50); converting a retrieval request sent from a user terminal connected to the network to said first server into a format which is concordant with the database to be accessed (query is independent of type of database, column 2, lines 6-17, lines 41-47) ; and directly retrieving the

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real data from the database in response to the converted retrieval request (Figure 4B, column 2, lines 36-38)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Syeda-Mahmood (US Patent, 5,920,856) in view of Mehrotra et al. (US Patent, 6,115,717, hereinafter

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referred as Mehrotra) and further in view of Thomas et al. (US Patent, 6,061,692, hereinafter referred as Thomas).

As to claims 1 and 2, Syeda-Mahmood discloses a system with system/method of data retrieval by a user from a distributed database (distributed database used by multiple users, column 1, lines 6-9), comprising: saving metadata pertaining to real data stored in databases distributed on a network in first servers distributed on said network associated with each of said databases (web site database reads on first servers, Figure 1, item 7, column 5, lines 15-16; column 6, lines 10-13); collecting metadata saved in said first servers and storing said metadata in a metadata database of a second server without storing the real data represented by said metadata (store metadata in metadata server separating from multimedia database, Figure 1, item 2, column 4, lines 6-9, lines 20-21, column 5, lines 15-16); extracting metadata that matches a user retrieval request by searching metadata stored in said metadata database (query meta-database, Figure 2, column 4, lines 23-26, column 6, lines 49-51) ; inputting a retrieval condition for the database on the basis of a retrieval result of the metadata for said metadata database (Figure 3, column 5, lines 24-27); issuing a real data retrieval request from the user to the first server indicated by the extracted metadata (transform query result form meta-database into forms for respective database, Figure 3, column 7, lines 14-16), wherein said real data retrieval request is issued by bypassing said second server (retrieve data from multimedia database, first server, Figure 3, column 7, lines 17-18); and retrieving, by the first server, the real data from the corresponding database in accordance with the real data retrieval request (Figure 1, column 7, lines 17-18, column 9, lines 21-38).

Syeda-Mahmood discloses the elements of claims 1 and 2 as noted above but does not explicitly disclose saving metadata pertaining to real data stored in first servers associated with each of said databases and search agent and meta database are in different servers.

Mehrotra discloses saving metadata pertaining to real data stored in first servers associated with each of said databases (Figure 1, column 3, lines 22-26).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata associated with data in a same location as taught by Mehrotra for the purpose of creating data (image data) and its metadata in the same time (Figure 1, column 2, lines 1-4, Mehrotra). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata is consistent with data.

Thomas discloses metabase (database stored metadata) can be stored either in local server or remote server (Figure 3, column 12, lines 31-38, 48-59).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata as a separate server as taught by Thomas for the purpose of optimum the time necessary to retrieve desired information (column 12, lines 36-38, Thomas). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata can be easily accessed in an area network.

As to claim 3, Syeda-Mahmood discloses a computer-readable recording medium recording a program for making a computer implement, in a database system built by distributing on a network one or more databases (distributed database used by multiple users, column 1, lines 6-9), one or more first servers for searching the databases for real data (multiple web site databases, Figure 1), and one or more second servers different from the first servers (web-server and meta-database, Figure 1), the functions of: collecting and managing the metadata by the second server from the one or more first servers by acquiring metadata by the second server when the metadata which is saved in the first server and pertains to the database has been updated (store metadata in metadata server separating from multimedia database, Figure 1; item 2, column 4, lines 6-9, lines 20-21, column 5, lines 15-16, periodically update meta-database, column 6, lines 13-15), and retrieving the real data by the first server in accordance with a retrieval request, wherein the updated metadata is used to directly retrieve the real data by the first server while bypassing the second server (Figure 1, column 7, lines 17-18, column 9, lines 21-38).

Syeda-Mahmood discloses the elements of claims 1 and 2 as noted above but does not explicitly disclose saving metadata pertaining to real data stored in first servers associated with each of said databases and search agent and meta database are in different servers.

Mehrotra discloses saving metadata pertaining to real data stored in first servers associated with each of said databases (Figure 1, column 3, lines 22-26).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata associated with data in a same location as taught by Mehrotra for the purpose of creating data (image data) and its



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metadata in the same time (Figure 1, column 2, lines 1-4, Mehrotra). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata is consistent with data.

Thomas discloses metabase (database stored metadata) can be stored either in local server or remote server (Figure 3, column 12, lines 31-38, 48-59).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata as a separate server as taught by Thomas for the purpose of optimum the time necessary to retrieve desired information (column 12, lines 36-38, Thomas). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata can be easily accessed in an area network.

**As to claim 4**, Syeda-Mahmood discloses a computer-readable recording medium recording a program for making a computer implement, in a database system built by distributing on a network one or more databases (distributed database used by multiple users, column 1, lines 6-9), one or more first servers for searching the databases for real data (multiple web site databases, Figure 1), and one or more second servers different from the first servers (web-server and meta-database, Figure 1), the functions of: collecting and managing the metadata by the second server from the one or more first servers by acquiring metadata which is saved in the first server and pertains to the database at a predetermined time interval (store metadata in metadata server separating from multimedia database, Figure 1, item 2, column 4, lines 6-9, lines 20-21, column 5, lines 15-16, periodically update meta-database, column 6, lines 13-15), and retrieving

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the real data pertaining to the predetermined time interval by the first server in accordance with a retrieval request, wherein the saved metadata is used to directly retrieve the real data by the first server while bypassing the second server (Figure 1, column 7, lines 17-18, column 9, lines 21-38).

Syeda-Mahmood discloses the elements of claim 4 as noted above but does not explicitly disclose saving metadata pertaining to real data stored in first servers associated with each of said databases and search agent and meta database are in different servers.

Mehrotra discloses saving metadata pertaining to real data stored in first servers associated with each of said databases (Figure 1, column 3, lines 22-26).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata associated with data in a same location as taught by Mehrotra for the purpose of creating data (image data) and its metadata in the same time (Figure 1, column 2, lines 1-4, Mehrotra). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata is consistent with data.

Thomas discloses metabase (database stored metadata) can be stored either in local server or remote server (Figure 3, column 12, lines 31-38, 48-59).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata as a separate server as taught by Thomas for the purpose of optimum the time necessary to retrieve desired information (column 12, lines 36-38, Thomas). The skilled artisan would have been motivated to improve

the invention of Syeda-Mahmood per the above such that metadata can be easily accessed in an area network.

As to claim 5, Syeda-Mahmood discloses a computer-readable recording medium recording a program for making a computer implement, in a database system built by distributing on a network one or more user terminals (Figure 1, item 3), one or more databases (Figure 1, item 1), one or more first servers for searching the databases for real data (Figure 1, item 1), and one or more second servers for collecting metadata which pertain to real data stored in the one or more databases from the one or more first servers and managing the collected metadata (store metadata in metadata server separating from multimedia database, Figure 1, item 2, column 4, lines 6-9, lines 20-21, column 5, lines 15-16), the functions of: extracting metadata which matches a retrieval request from the user terminal from the second server by search in response to the retrieval request (query meta-database, Figure 2, column 4, lines 23-26, column 6, lines 49-51); inputting a retrieval condition for retrieving real data from the database using a retrieval result of the metadata (Figure 3, column 5, lines 24-27); and transferring the input retrieval condition to the first server indicated by the extracted metadata as a retrieval request, while bypassing the second server (transform query result form meta-database into forms for respective database, Figure 3, column 7, lines 14-16, retrieve data from multimedia database, first server, Figure 3, column 7, lines 17-18, column 9, lines 21-38).

Syeda-Mahmood discloses the elements of claims 1 and 2 as noted above but does not explicitly disclose saving metadata pertaining to real data stored in first servers associated with each of said databases and search agent and meta database are in different servers.

Mehrotra discloses saving metadata pertaining to real data stored in first servers associated with each of said databases (Figure 1, column 3, lines 22-26).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata associated with data in a same location as taught by Mehrotra for the purpose of creating data (image data) and its metadata in the same time (Figure 1, column 2, lines 1-4, Mehrotra). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata is consistent with data.

Thomas discloses metabase (database stored metadata) can be stored either in local server or remote server (Figure 3, column 12, lines 31-38, 48-59).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Syeda-Mahmood's disclosure to store metadata as a separate server as taught by Thomas for the purpose of optimum the time necessary to retrieve desired information (column 12, lines 36-38, Thomas). The skilled artisan would have been motivated to improve the invention of Syeda-Mahmood per the above such that metadata can be easily accessed in an area network.

### ***Related Prior Arts***

The following list of prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Brunner, Hans et al., US 5550971 A, "Method and system for generating a user interface adaptable to various database management systems", (...a user interface

that is adaptable to various database systems regardless of the database's query language or underlying modeling constructs,... a model and a meta-model describing a plurality of data items as instances of either a data object type or a functional object type.).

- Barry; Tim et al., US 6003039 A, "Data repository with user accessible and modifiable reuse criteria", (...a repository which stores metadata relating to data stored in one or more databases. The repository includes a repository database in which the metadata is stored, one or more scanners each of which scans at least one database and obtains metadata therefrom, and one or more loaders each of which loads metadata obtained by at least one scanner into the repository database in accordance with the externalized reuse criteria.).
- Gorelik; Vladimir et al., US 6317737 B1, "Data descriptions in a database system", (...The data descriptions include baseviews and metaviews. The baseviews reference specific portions of the actual database schema while the metaviews provide descriptions of baseviews.).

*Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shew-Fen Lin whose telephone number is 571-272-2672. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2166  
January 12, 2006

Shew-Fen Lin  
Patent Examiner

  
**MOHAMMAD ALI**  
**PRIMARY EXAMINER**